REMARKS

Reconsideration of and timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

Claims 1, 2, 5-9, 11 and 12 are pending active examination, all of which are rejected. Claims 13-31 are withdrawn from consideration as being drawn to non-elected inventions. Claims 1 is amended to provide a clearer presentation of the claimed subject matter. No new claims have been added and no new matter has been added.

In the Office Action, the Examiner has rejected claims 1, 2, 5-9, 11, and 12 under 35 U.S.C. §103(a) over U.S. Patent Application No. 2002/0005252 of Masuda et al. (Masuda hereinafter), in view of U.S. Patent No. 5,647,953 of Williams et al. (Williams hereinafter), and further in view of U.S. Patent No. 5,522,932 of Wong et al. (Wong hereinafter). The applicants respectfully note that the Examiner has not provided a rationale for rejection of claim 12 over Masuda in view of Williams and Wong, and have responded herein under the assumption that the listing of claim 12 in the heading of the above rejection was in error. The Examiner has rejected claim 12 under 35 U.S.C. §103(a) over Masuda in view of Williams and Wong, and further in view of U.S. Patent No. 5,605,637 of Shan et al. (Shan hereinafter). The applicants respectfully traverse these rejections for reasons presented below.

In the present Office Action, the Examiner has objected to the text of the Abstract for not clearly outlining the steps of the claimed process. As the Examiner has suggested in the Office Action, the applicants have amended the Abstract to specifically point out that preseasoning of a component is performed in second plasma processing chamber, different than the first plasma processing chamber used to process a substrate. The applicants respectfully submit that support for the amendment can be found at least in currently-pending independent claim 1 and in paragraph [0014] of the as-filed specification, and that no new matter has been introduced.

Turning now to the merits, the applicants would first like to thank the Examiner for withdrawing rejections of claims 1, 2, 5-9, 11, and 12 under 35 U.S.C. §112 ¶1.

To provide a clearer presentation of the invention, and to place the application in better condition for possible appeal, the applicants have amended independent claim 1 to recite "A method for manufacturing a substrate with a plasma processing system, the method comprising: obtaining a component of a plasma processing system which has been coated with a film of a material; disposing said component in a first plasma processing chamber; disposing a substrate on a chuck in the first plasma processing chamber; and forming a first plasma in a processing region within the first plasma processing chamber, wherein the film of the material has been coated using a second plasma in a second plasma processing chamber different from said first plasma processing chamber, the material being dissociated by the second plasma in the second plasma processing chamber from dummy substrates." The applicants respectfully submit that support for the amendment can be found at least in paragraph [0014] of the as-filed specification, and that no new matter has been introduced.

The applicants further respectfully submit that none of Masuda, Williams, and Wong references teach or suggest, alone or in combination, a method of preseasoning a plasma chamber component "using a second plasma in a second plasma processing chamber different from said first plasma processing chamber, the material being dissociated by the second plasma in the second plasma processing chamber from dummy substrates." Therefore, for reasons outlined in detail below, the applicants respectfully traverse the rejection of independent claim 1 under 35 U.S.C. §103(a).

In paragraphs specifically pointed out to by the Examiner [0057,0032], and elsewhere in the specification and claims, Masuda discusses a plasma etch process in a chamber with heated walls to control deposition, and a wall cleaning method used to remove deposits after they have built up to a point where danger of flaking and therefore, substrate processing yield reduction due to contamination, exists. Masuda is silent about preseasoning components in a second plasma processing chamber. Indeed, Masuda is silent about preseasoning altogether, even in the first plasma processing chamber, i.e. the chamber used to process substrates. The entire Masuda

disclosure is directed at wall deposition mitigation, i.e. reduction of deposition during production substrate processing, i.e. in the first plasma processing chamber, by heating walls to lessen deposition and lengthen intervals between (wet) cleanings which require the processing system to be taken off-line.

Williams discusses the cleaning of chamber parts after deposit buildup during substrate production, and the subsequent preseasoning of the wall in an in-situ process, i.e. inside the first plasma processing chamber, where substrates will also be processed. The present application discusses the disadvantages of this approach (paragraph [0005] of the as-filed specification). Specifically, it points out the need to keep the processing system out of substrate production until the preseasoning process in the first plasma processing chamber has been completed.

To decrease the processing system downtime due to preseasoning, paragraphs [0006,0014] of the as-filed specification, and independent claim 1, as amended, introduce the step of preseasoning a component in a second plasma processing chamber, i.e. a different chamber, such that the first plasma processing chamber can be used for substrate production immediately after installation of the preseasoned component. This is quite unlike anything described in Masuda and Williams, alone or combined. The Examiner, however, relying only on Masuda and Williams, contends that the teachings of Masuda can be modified in light of the teachings of Williams, "because Williams teaches that such methods are known in the art" (page 4 of the Office Action), to arrive at the method of claim 1. The Examiner does not provide any rationale why the teachings of Williams would suggest to a person skilled in the art of semiconductor processing, to modify the teachings of Masuda, to preseason a component in a second plasma processing chamber, since both Masuda and Williams are entirely silent about at least a second plasma processing chamber. MPEP 2141.

> The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336

> (Fed. Cir. 2006), stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" KSR, 550 U.S. at ___, 82 USPQ2d at 1396.

To cure the above deficiency wherein the component is preseasoned externally to the first plasma processing chamber, the Examiner introduces the Wong reference, which describes the use of a plasma processing chamber component coated outside the first plasma processing chamber with a rhodium film using an electroplating process. Electroplating is a process wherein a component is coated with a film inside a liquid-containing electrochemical cell. Wong at least does not teach or suggest the use of a second plasma processing system to preseason the component, using a plasma deposition process. However, the Examiner concludes that it would have nevertheless been obvious to one skilled in the art of semiconductor processing, that an electroplating material deposition process performed external to the first plasma processing chamber suggests the preseasoning of a component in a second plasma processing chamber. The Examiner further contends that there is even a "reasonable expectation of success" (page 5 of the Office Action) associated with attempting to use the combined teachings of the Masuda, Williams, and Wong references, but does not offer a rationale as to how and why an electroplating process used externally to coat a screw installed in a plasma processing chamber, would suggest to one skilled in the art the use of a second plasma processing chamber to coat a component using plasma deposition? MPEP 2141. It is a very well known fact that electroplating and plasma deposition are physically entirely different and not mutually exchangeable processes, used to apply different types of materials, and that in light of these facts only, the former cannot suggest the latter, much less with a reasonable expectation of success, as the Examiner asserts. The extent to which Wong fairly aids the combination of Masuda and Williams, is in the suggestion to preseason the material outside the first plasma processing chamber, but Wong does not address the limitation "wherein the film of the material has been coated using a second plasma in a second plasma processing chamber different from said first

plasma processing chamber, the material being dissociated by the second plasma in the second plasma processing chamber from dummy substrates", i.e. Wong does not teach or suggest in any way how the preseasoning is done.

The Shan reference, introduced in rejection of dependent claim 12, does not cure the abovementioned deficiencies, as it merely introduces the pumping deposition shield as a specific plasma processing chamber component to be preseasoned.

Because Masuda, Williams, and Wong, taken alone or in combination, fail to teach all the steps and limitations of independent claim 1, and further, because the Examiner has not provided any rationale to explain how the combined references suggest the missing steps and limitations, and how following the suggestion provides a reasonable expectation of success (MPEP 2141), the applicants respectfully submit that claim 1 is patentable over Masuda in view of Williams and Wong, and respectfully request that the rejection of claim 1 under 35 U.S.C. §103(a) be withdrawn.

Regarding rejections of dependent claims 2, 5-9, 11, and 12 under 35 U.S.C. §103(a), the applicants respectfully submit that these claims are patentable at least by virtue of being dependent (directly or indirectly) on patentable independent claim 1. Therefore, the applicants respectfully request that the Examiner withdraw rejections of claims 2, 5-9, 11, and 12 under 35 U.S.C. §103(a).

Consequently, in view of the present amendments and abovementioned remarks, no further issues are believed to be outstanding in the present application and the present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested.

The applicants are of the opinion that provisions of 37 C.F.R. §1.136(a) apply to this proceeding, and that a one-month extension of time is due with the filing of this response. The applicants hereby petition for a one-month extension of time under 37 C.F.R. §1.136(a), with the appropriate fee payment shown on the attached Electronic Fee Sheet.

Please charge our Deposit Account No. 50-3451 for any additional fee(s) that may be due in this matter, and please credit the same deposit account for any overpayment.

Should the Examiner have any questions or deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Respectfully submitted,

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